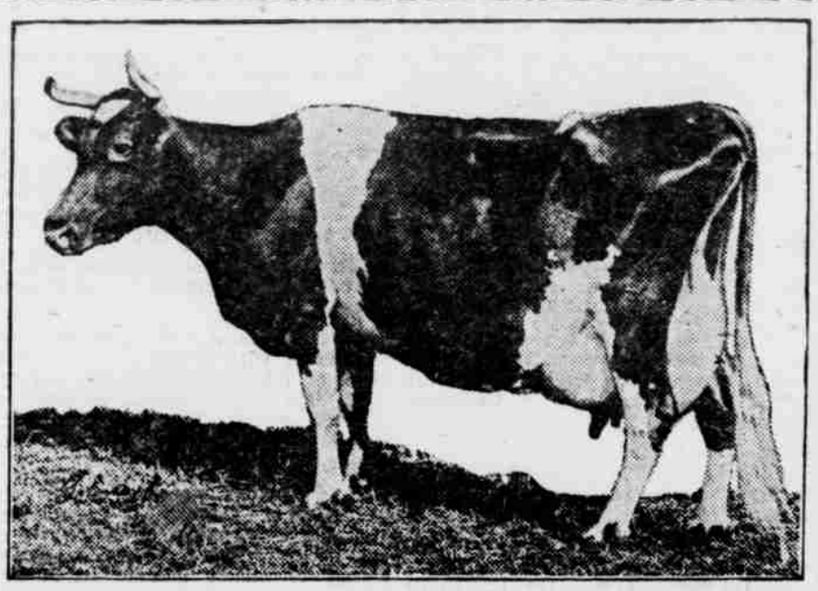
GROWING DEMAND FOR SANITARY MILK



Splendid Type of Dairy Cow—Note the Raw, Rough Backbone and Hip; Large, Smooth Udder; Thin, Long Neck; Broad Forehead and Nose, and Big Barrel of Bread Basket—Dairy Cow Is Not Necessarily Pretty Animal; She Is a Machine to Convert Feed Into Milk and Butter.

(By W. A. STOCKING, Jr.)

There is a steadily, and in many places a rapidly growing demand for cleaner and more wholesome milk, both for direct consumption and for the production of butter, cheese and other milk products. This demand will continue to grow just as rapidly as the milk-consuming public comes to realize the importance of using milk which has been produced under healthful, sanitary conditions, and the dangers which may accompany the use of milk which has been produced and handled under conditions both insanitary and unhealthful. Many progressive dairymen are awake to this call for an improved quality of milk, and are desirous of knowing how to meet it. The increasing interest and importance of this question has led the experiment station in nearly every state in the Union to undertake the work of finding out through careful experiments the best methods of producing good milk.

Right Kind for Milk.

Various methods of clarifying milk, such as straining, filtering, sedimentation, and the use of centrifugal machines, have been employed both in this country and in Europe. Some of these have been fairly successful in removing both dirt and bacteria, but none has proved entirely satisfactory. One important objection to such methods of handling milk, especially in the small dairy, is that they require considerable time, and some of them additional machinery, and thus add to the cost of production. It is much more important, however, to go farther back than this, and to prevent the dirt from getting into the milk at all, because much of it dissolves readily in the warm milk, cannot be removed, and thus contaminates the milk with both filth and the bacteria of the dirt. It is necessary, therefore, to secure some means whereby the dirt can be originally excluded.

It has been found that if the stables are well cleaned and ventilated and exposed to sunlight, if the cows are kept well brushed and cleaned; if, just before milking, the parts of the cow immediately above and around the pail are washed or wiped with a damp cloth, and if the milker is clean, wears clean clothes, and uses sterile utensils, the quantities of dirt and bacteria which get into the milk are greatly reduced.

A number of devices for excluding the dirt have been tried in this country and in Europe. One of the simplest and most practical of these is a milking pail with a cover which reduces the area of the surface exposed during the milking. In order to test the efficiency of such a pail for keeping out dirt that would fall into an open pail, experiments were carried on at the Connecticut experiment station which resulted in the following: The amount or dirt in the milk from the covered pail was only 37 per cent of that in the open pail. By the use of the covered pail an average of 29 per cent of the total number of bacteria and 41 per cent of the acid-producing bacteria were excluded from the fresh milk.

DRAIN SOGGY SPOTS ON FARM

Wet, Marshy Places Are Not Only Inconvenient to Work Around, but Are Expensive.

(By DANIEL SCOATES, Mississippi Experiment Station.)

Couldn't you turn into money-making patches those soggy spots on your farm—marshy spots, where the young corn turns yellow and has the "drowned-out" look? Such spots are not only inconvenient to work around, but are expensive as well.

Tile drains, as a rule, have proved to be the most economical form of drainage, as they last indefinitely and give satisfactory returns.

Use good tile.

Use an engineer's level in putting in your tile.

Use 4-inch tile or larger for ordinary purposes.

Have the size of your mains calculated.

Before you cover your tile test the grade with a level to see that the drain has the proper fall.

Protect your outlets against caving banks and burrowing animals.

Get assistance in putting in tile if you don't understand how it is done.

CARE FOR WATERMELON CROP

Frequent Cultivation Is Recommended by C. K. McQuarrie of Florida Experiment Station.

Frequent cultivation for watermelons is recommended by C. K. McQuarrie of the Florida experiment station. They should be plowed with some shallow-running tool until they cover the ground. At the last cultivation some hay crop should be planted between the rows. A legume is preferred. Mr. McQuarrie does not recommend the planting of watermelons in raised hills, except on flatwoods. The hills soon dry out below the seed and they will not germinate. On high land it would probably be better to plant in a furrow. The hill not only retards germination, but it confines the root system of the plants when they come up.

Wheat Bran for Ewes.

Put some wheat bran in the ewe's grain ration. It will help to grow a strong lamb, and put the ewe in shape to nourish the lamb when it comes.

FREAK VARIETIES OF FRUITS

Home Orchardist Should Be Satisfied With Standard Classes—New Kinds Are Risky.

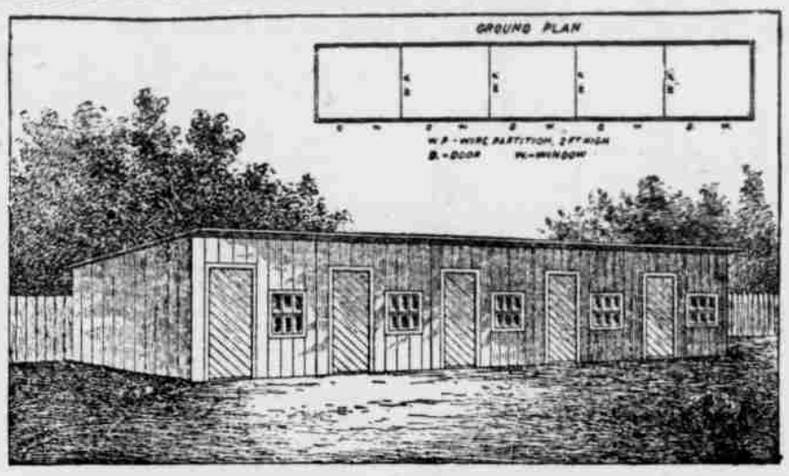
(By C. W. RAPP, Department of Horticulture A. & M. College, Stillwater.)

New and freak varieties of fruits are frequently "gold bricks." A new or freak variety of fruit has no place on the average farm. The home orchardist should be contented with the standard varieties. Then, when his trees come into bearing, he will have a real orchard. If new or freak varieties are planted they will in about nine cases out of ten be worthless. The farmer should save his money and leave the testing of unknown varieties to those who can afford to do it. Later he can profit by their experience.

Vegetables for Hens.

Turnips, pumpkins, parings, etc., are eaten with greater relish by the hens when they are cooked, thoroughly mixed with a mash and fed steaming hot.

DUCK RAISING IS FLOURISHING INDUSTRY



Five-Pen Breeding House for Ducks.

R. W. Curtiss of Ransomville, N. Y., who raises about 30,000 ducks a year and makes big profits at the business, says it is harder manual work to raise ducks than chickens, and the business requires patience and good judgment. He selects eggs from the stronger birds and sets them in incubators and broods them until they are eight weeks old when they are fattened for market.

"Before these ducks are fattened we sort out our breeding stock at the age when the ducks are old enough so that we can tell the sexes. I go," says Mr. Curtiss, "through a large number of ducks and perhaps I might get five or ten fit to breed from out of a large flock of one hundred. That seems like a lot of work. Every time you change the feed the ducks won't eat, and if you change gradually they will probably be off their feed for two days; and just at that time we sort out the breeding stock, and it is just at the time we change the feed so that we do not lose anything.

"We handle the ducks by the neck; we never take them by the legs. We hold the duck up and look at him, and if he has a good broad breast all the way through and fairly deep keel, and broad back, and not too long a neck, and his head not too long, and if he fights a great deal and tries to get away, showing he is strong, then we will pick out that duck. He has got to be a certain weight; we do not actually weigh them because that is too much trouble.

"We take the ducks out in May and they are taken out in flocks of two hundred. We start and drive these ducks over to the pasture and in driving them we will say that we have two hundred and ten or two hundred and fifteen.

"We keep them in a large wood lot. We take lots of time driving them along, not too slow and not so slow as you would drive market ducks. We keep them moving and when we get them half way over two or three of them will break down and flap their wings, and they cannot walk. These

House for Growing Ducks.

ducks are left right where they are. It is simply the survival of the fittest, and when we get to the breeding pens there will be ducks strung all the way along where we have been driving them. It is only the ducks that have strength to walk this distance, being urged all the time, that are put in the pen. Then we go back and clean up the ones that are left and they are put into the marketing pen. It does not matter how nice a duck they are, because it is strength we are after.

"We put one hundred to two hundred ducks in a pen, and there is no shed or anything for them to run under. It is just simply a wood lot. It would be just as well to have them run in a field, provided they had some artificial shade but decidedly you have got to have some shade for ducks. If you put ducks in a hot field in the summertime there is danger. I have seen full-grown ducks get sunstruck and lie down and die.

"We feed them there for five months on light food. We do not want to fatten them. If there are any ducks that get off their feed they are taken right off; they are not kept. We keep lanterns burning in the trees on dark nights to keep them from getting scared.

"A peculiar thing about ducks is that they will run and trample on each other and jump in the corner of the pens if they get scared on a dark night. If it is a bright moonlight night we do not light the lanterns.

"The feed for these ducks is four parts bran to one part of flour and one part cornmeal and one-twentieth beef scrap. For green feed we use four parts clover. The clover should be about one-third or a little more than one-third of the entire feed. You can feed them all the green feed they will eat. A good indication is to watch their troughs, and after they have eaten their feed if they leave a little clover in the trough you know they are getting all they want, and may be a little more; and if they clean this trough up they haven't quite enough to eat. If they have too much to eat, they pick the green feed out and leave nothing but the mash, and then you know they haven't enough green feed.

"We feed them wet mash; mix it a little more moist than you do for chickens. These ducks must not be fed all they will eat, because if you do they will get in good condition. They are not to be starved, but you must keep them just a little hungry, and they will go out in this one or two acres of land and eat more or less green feed, and they will run up and down the pen and it will give them muscle.

"We keep them in this manner until they are five months old, and then we change and put them in permanent quarters. Most any kind of a building will do for a duck house. It does not require very much light, but if you want eggs all the winter you must have it warm enough so that the eggs won't get chilled. If you go through pretty often and take up the eggs they will not get chilled.

"We do not have any nests in our duck houses; we simply bed them with shavings. We did try nests, but we could not see any great benefit from them. They will dig a hole in the corner and lay the egg and cover it up and when you go through in the morning you have to be careful that you do not walk on the eggs.

"We breed from a pullet, we never breed from a yearling duck. A duck will take on fat very easily, and if you keep them over the second year they get too fat, and they will not lay as early, and the eggs are not fertile, and we cannot get good results.

"We mate one drake and five ducks. We start these in October, and as the season advances, say about the first of March, we watch the ducks, and if we see two drakes get to fighting, we catch one of them; we catch the poorest and put him in a pen by himself. Whenever we see any fighting, we take out a drake, and when there is no fighting, we leave them alone, and they balance themselves up.

"Sometimes you will find they will run for a long time and there will be no fighting; then, there will come a rain storm, and there will be puddles of water in the yard, and if you go out you will find dozens of them fighting, and they will tear each other to pieces. They will get the blood started and your five drakes will get after one and fairly eat him. I have seen it when we would not have more than one drake to ten or twelve ducks, and we would get just as good eggs as we got in the winter."

EGGS SHIPPED FOR HATCHING

Should Be Nested Deeply and Carefully Wrapped in Excelsior—Cover Basket With Cloth.

Eggs to be shipped for hatching, if packed in baskets, should be nested deeply in excelsior and each egg carefully wrapped in excelsior.

The basket may be covered with a piece of cloth which is sewed to the basket at the edges, or held in place by tacks carefully pushed in the basket, or may have its edge pushed up under the top strip of the basket, outside, with the edge of a case knife.

SETTING EGGS FROM PULLETS

As General Rule Young Fowls Are in Poor Physical Condition—Hens' Eggs Are Best.

Better hatches and stronger chicks will result by setting eggs from hens than from pullets. As a rule, pullets lay more during the winter and are poorer in physical condition at the beginning of the hatching season than are the hens, which gives rise to a larger number of small eggs and more infertile ones.

Add a little salt to the sprouted oats for a change.

Eavesdropping.

Belle—She wouldn't stoop to listening to conversation through the keyhole.

Beulah—I know it. A party telephone wire is good enough for her.

Easy to Forgive.

A minister whose daughter eloped with a bricklayer has forgiven them and welcomed his son-in-law into his home. There is nothing very surprising about this, considering the relative wages of bricklayers and salaries of many ministers.—Hartford (Conn.) Post.

It takes a man with an unusually good disposition not to care a rap about the kind of weather that comes along.

Girls who want to marry are always looking in shop windows for new brands of bait.